IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A system for extracting heavy metal from glass waste, comprising:

a grinding device for crushing hazardous glass into glass particles;

a screen for filtering glass particles having a diameter size of between 10 nanometers and less than or equal to 2 millimeters producing filtered glass particles;

a conveyor for transporting the filtered glass particles to a tank having a solution of water and acid; and

a circulating pump device for circulating the filtered glass particles and the solution for a period of time, wherein the filtered glass particles have heavy metals extracted thereby producing treated glass particles, and the extracted heavy metals mix with the solution to produce a modified solution, and wherein the treated glass particles encapsulate any remaining heavy metals in their composition and are not capable of being fractured because of their diameter sizes, and wherein the treated glass particles are safe for disposal or subsequent consumption.

2. (Original) The system of claim 1 further comprising a solution-pumping device for pumping the modified solution out of the tank.

3. (Cancelled)

4. (Cancelled)

5. (Cancelled)

6. (Currently Amended) The system of claim 1, wherein the tank is adapted to house ~~acid is~~ at least one of Nitric acid (HNO_3), Hydrochloric acid (HCL), and Phosphoric acid (H_3PO_4) as the acid.

7. (Currently Amended) The system of claim 1, wherein the circulating pump is adapted to be configured to circulate by a configurable period of time ~~is configurable~~ based on a size for the diameters of the filtered glass particles and a temperature of the solution and the filtered glass particles within the tank.

8. (Original) A system for extracting heavy metal from glass waste, comprising:

a tank;

a circulation pump interfaced to the tank; and

a regulating device interfaced to the tank and the circulation pump;

wherein the tank is adapted to receive glass particles having diameter sizes that are between 10 nanometers and less than or equal to 2 millimeters, the tank is also adapted to receive a solution of acid and water, and wherein the circulating pump circulates the solution and the glass particles within the tank for a period of time, and the period of time is controlled by the regulating device which controls and monitors a temperature of the solution and the glass particles within the tank, and wherein after the period of time the glass particles have heavy metals extracted and become treated glass particles, and the solution becomes a modified solution that includes the extracted heavy metals.

9. (Original) The system of claim 8 further comprising a pumping device that pumps the modified solution out of the tank.

10. (Original) The system of claim 8 further comprising a screen and conveyor device that transports the treated glass particles out of the tank.

11. (Original) The system of claim 8 further comprising a rinsing tank having tap water and adapted to receive the treated glass particles from the tank for rinsing.

12. (Original) The system of claim 8, wherein the regulating device elevates the temperature and thereby reduces the period of time for circulation of the circulating pump.

13. (Currently Amended) The system of claim 8, wherein the regulating device is adapted to raise ~~raises~~ the temperature to a desired temperature based on ~~and the desired temperature along with~~ the diameter sizes, and the desired temperature and the diameter sizes determine the period of time for circulation.

14. (Original) The system of claim 8 further comprising a grinding device that grinds glass waste into the glass particles and supplies the glass particles to the tank.

15. (Currently Amended) A system for extracting heavy metal from glass waste, comprising:

a grinder device;

a screen and conveyor device; and

a processing tank having a circulating pump, wherein the grinding device grinds hazardous glass waste into glass particles and the screen and conveyor device filters out the glass particles that have diameter sizes between 10 nanometers and 2 millimeters and transports filtered glass particles to the processing tank, the processing tank includes the filtered glass particles and a solution of acid and water, and the circulating pump circulates the solution and the filtered glass particles producing treated glass particles and a modified solution, the treated glass particles have heavy metals extracted, and the modified solution includes the extracted heavy metals and wherein the treated glass particles encapsulate any remaining heavy metals in their composition and are not capable of being fractured because of their diameter sizes, and wherein the treated glass particles are safe for disposal or subsequent consumption.

16. (Original) The system of claim 15, wherein the processing tank includes a heating device that elevates a temperature of the solution and the filtered glass particles within the processing tank during circulation.

17. (Currently Amended) The system of claim 15, wherein the circulating pump is adapted to circulate ~~circulates~~ the solution and the filtered glass particles for a configurable period of time based on the temperature.

18. (Original) The system of claim 15 further including a solution pumping device for removing the modified solution from the processing tank after the circulating pump finishes circulating the solution and the filtered glass particles.

19. (Original) The system of claim 15 further comprising a rinsing tank that receives the treated glass and tap water for rinsing the treated glass particles.

20. (Currently Amended) The system of claim 15, wherein the circulating pump is adapted to circulate ~~circulates~~ the solution and the filtered glass particles for a period of time that is configurable based on the temperature of the solution and the filtered glass particles within the processing tank and based on the diameter sizes of the filtered glass particles.

21. (NEW) A system for extracting heavy metal from glass waste, comprising:

a grinding device for crushing glass into glass particles;

a screen for filtering glass particles having a diameter size of between 10 nanometers and less than or equal to 2 millimeters producing filtered glass particles;

a conveyor for transporting the filtered glass particles to a tank having a solution of water and acid;

a circulating pump device for circulating the filtered glass particles and the solution for a period of time, wherein the filtered glass particles have heavy metals extracted thereby producing treated glass particles, and the extracted heavy metals mix with the solution to produce a modified solution; and

a regulating device that determines the period of time for circulation based on elevating a temperature of the solution and the filtered glass particles within the tank.

22. (NEW) The system of claim 21, wherein the regulating device decreases the period of time for circulation when the temperature is elevated.

23. (NEW) The system of claim 21, wherein the regulating device increases the period of time for circulation when the temperature is decreased.